

ABSTRACT

The present invention provides a simplified bone fastener removal tool which allows the surgeon to remove bone screws or other bone fasteners from bone, and from bone plates incorporating fastener locking elements. The tool includes an inner shaft which axially engages the bone fastener, a drive shaft which allows the fastener to be rotated using the tool, and an internally threaded outer sleeve which, in combination with the drive shaft, allows for a controlled removal of the fastener from the bone plate and bone. In particular, the internal threads of the outer sleeve engage external threads on the drive shaft, such that rotating the drive shaft while maintaining the outer sleeve fixed causes the drive shaft to translate with respect to the sleeve. Thus, when a fastener is axially engaged with the drive shaft, a controlled removal of the fastener from the bone and bone plate is accomplished simply by rotating the drive shaft with respect to the outer sleeve. No pulling on the fastener is necessary. A method of using the tool is also provided.